

PROBABILITY

1. If a number is chosen at random from the set $\{1, 2, 3, \dots, 100\}$, then the probability that the chosen number is a perfect cube is

- a. $1/25$ b. $1/2$ c. $4/13$ d. $1/10$

2. What is the probability of getting at least one six in a single throw of three unbiased dice?

- a. $1/6$ b. $125/216$ c. $1/36$ d. $81/216$ e. $91/216$

3. In a simultaneous throw of two dice, what is the probability of getting a doublet?

- a. $1/6$ b. $1/4$ c. $2/3$ d. $3/7$

4. A bag contains 4 red balls, 5 green balls and 6 white balls. A ball is drawn at random from the box. What is the probability that the ball drawn is either red or green?

- a. $2/5$ b. $3/5$ c. $1/5$ d. $7/15$

5. When 4 dice are thrown, what is the probability that the same number appears on each of them?

- a. $1/36$ b. $1/18$ c. $1/216$ d. $1/5$

6. The probability that it is Friday and that a student is absent is 0.03. Since there are 5 school days in a week, the probability that it is Friday is 0.2. What is the probability that a student is absent given that today is Friday?

- a. 10% b. 15% c. 12% d. 13%

7. Two dice are rolled. The probability of getting a sum of at least 9 is

- a. $13/36$ b. $5/18$ c. $35/36$ d. $11/36$

8. If four cards are drawn at random from a well shuffled pack of cards, what is the probability that each card is an ace?

- a. $\frac{6}{52}C_4$ b. $\frac{4}{52}C_4$ c. $\frac{1}{52}C_4$ d. $\frac{3}{52}C_4$

9. A person tosses an unbiased coin. When head turns up, he gets Rs.8 and tail turns up he loses Rs.4. If 3 coins are tossed, what is probability that the gets a profit of Rs.12?

- a. $\frac{3}{8}$ b. $\frac{5}{8}$ c. $\frac{3}{4}$ d. $\frac{1}{8}$

10. A number n is chosen from $\{2, 4, 6 \dots 48\}$. The probability that 'n' satisfies the equation $(2x - 6)(3x + 12)(x - 6)(x - 10) = 0$ is

- a. $\frac{1}{24}$ b. $\frac{1}{12}$ c. $\frac{1}{8}$ d. $\frac{1}{6}$